

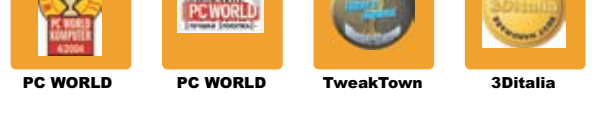
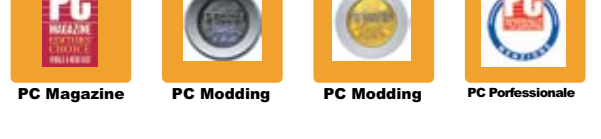
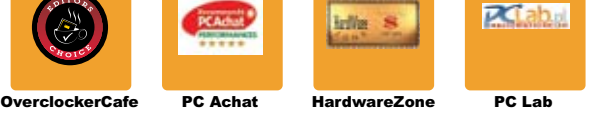
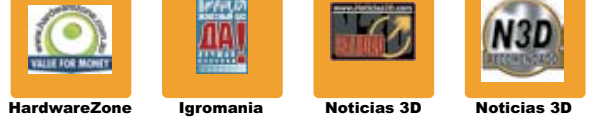
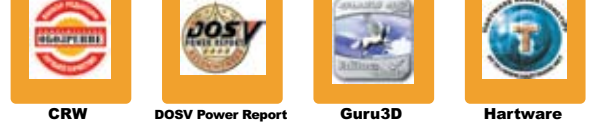
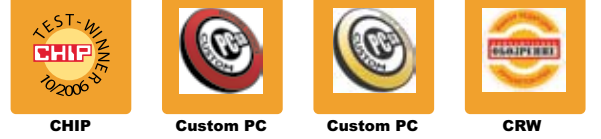
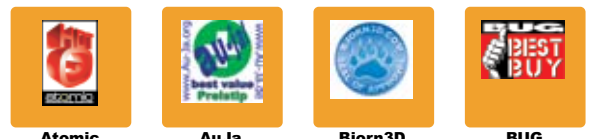
# Stable · Durable · Performance G31-M7G DVI

## Better than ever

The Motherboard  
Trusted by Media



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RECOMMENDED BUY  
NOVEMBER 2006



### Front Audio Connector

\*Front-Audioanschluss  
\*Connecteur Audio du panneau avant  
\*Connettore audio frontale  
\*Conector de sonido frontal  
\*Conector de audio frontal  
\*Przednie złącze audio  
\*Входной звуковой разъем  
\*フロントオーディオコネクタ  
\*منفذ الصوت الأمامي

1	2
3	4
5	6
7	8
9	10

1 Mic Left in  
2 Ground  
3 Mic Right in  
4 GPIO  
5 Right line in  
6 Jack Sense  
7 Front Sense  
8 Key  
9 Left line in  
10 Jack Sense

### CD-IN Connector

\*CD-IN-Anschluss  
\*Connecteur d'entrée CD  
\*Connettore CD-in  
\*Conector de entrada de CD  
\*Conector para entrada de CDs  
\*Złącze wejścia CD  
\*Разъем ввода для CD  
\*CD-インコネクタ  
\*منفذ CD-IN

1	2
3	4

1 Left Channel Input  
2 Ground  
3 Ground  
4 Right Channel Input

### Serial Port Connector

\*Serieller Anschluss  
\*Conector Puerto serie  
\*منفذ تسلسلي  
\*Connecteur de Port série  
\*Conector da Porta série  
\*Connettore Porta seriale  
\*Złącze Port szeregowy  
\*Разъем Последовательный порт  
\*シリアルポートコネクタ

### 5.1-Channels HD Audio

\*Unterstützt High-Definition Audio / 5.1-Kanal-Audioausgabe  
\*Prise en charge de l'audio haute définition / Sortie audio à 5.1 voies  
\*Supporto audio High-Definition (HD) / Uscita audio 5.1 canali  
\*Soporte de sonido de Alta Definición / Salida de sonido de 5.1 canales  
\*Suporta a especificação High-Definition Audio / Saída de áudio de 5.1 canais  
\*Obsługa High-Definition Audio / 5.1 kanałowe wyjście audio  
\*Звуковая поддержка High-Definition / 5.1-канальный звуковой выход  
\*ハイデフィニションオーディオのサポート / 5.1 チャンネルオーディオアウト  
\*تدعم تقنية الصوت عالي التعريف من / 5.1 قنوات لخرج الصوت

### Printer Port Connector

\*Druckeranschluss Anschluss  
\*Conector da para impressora  
\*Connexioneur de Port d'imprimante  
\*Złącze Port drukarki  
\*Connettore Porta stampante  
\*Conector de impressora  
\*منفذ طابعة  
\*Разъем Подключения принтера

### S/PDIF-OUT Connector

\*S/PDIF-Ausgangsanschluss  
\*Connecteur de sortie S/PDIF  
\*Connettore output SPDIF  
\*Conector de saída S/PDIF  
\*Conector de saída S/PDIF  
\*Złącze wyjścia S/PDIF  
\*Разъем вывода для S/PDIF  
\*S/PDIF-Ауткоネクта  
\*منفذ خرج S/PDIF

1	2	3
---	---	---

1 +5V  
2 SPDIF\_OUT  
3 Ground

### Floppy Disk Drive Connector

\*Diskettenlaufwerkanschluss  
\*Conector da unidade de disquetes  
\*Connecteur de disquette  
\*Złącze napędu dyskietek  
\*Connettore floppy  
\*Conector disco flexible  
\*منفذ محرك أقراص مرنة

### Front Panel Connector

\*Fronttafelanschluss  
\*Connecteur du panneau avant  
\*Connettore pannello frontale  
\*Conector de panel frontal  
\*Conector do painel frontal  
\*Złącze panela przedniego  
\*Разъем на лицевой панели  
\*フロントパネルコネクタ  
\*منفذ اللوحة الأمامية

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Speaker  
HDD LED  
Reset  
Power LED  
On/Off

### USB 2.0 Connectors

\*USB 2.0-Anschluss  
\*Conector USB 2.0  
\*Connexioneur USB 2.0  
\*Connettore USB 2.0  
\*Conector USB 2.0  
\*Złącze USB 2.0  
\*Разъем USB 2.0  
\*منفذ USB 2.0

### PCI Slots

\*PCI-Steckplatz  
\*Fente PCI  
\*Alloggio PCI  
\*Ranura PCI  
\*Ranhura PCI  
\*Gniazdo PCI  
\*Cnot PCI  
\*PCI-スロット  
\*منفذ PCI

### SATA Connectors

\*SATA-Anschluss  
\*Conector SATA  
\*Connexioneur SATA  
\*Connettore SATA  
\*Conector SATA  
\*Złącze SATA  
\*Разъем SATA  
\*SATA-コネクタ  
\*منفذ SATA

### System Fan Header

\*System-Lüfter-Sockel  
\*Embase de ventilateur système  
\*Colettore ventolina sistema  
\*Cabecera de ventilador de sistema  
\*Conector da ventoinha do sistema  
\*Złącze głowkowe wentylatora systemowego  
\*Контактирующее приспособление вентилятора системы  
\*システムファンヘッド  
\*وصلة مروحة النظام

1	2	3
---	---	---

1 Ground  
2 +12V  
3 FAN RPM rate sense

### Clear CMOS Header

\*CMOS löschen-Sockel  
\*Embase d'effacement CMOS  
\*Collettore cancellazione CMOS  
\*Cabecera de borrado de CMOS  
\*Conector para limpeza de CMOS  
\*Złącze głowkowe kasowania CMOS  
\*Открытое контактирующее приспособление CMOS  
\*CMOS-Клир-А-Хеддз  
\*وصلة مسح CMOS

1	2	3
---	---	---

Pin 1-2 Close: Normal Operation (default)  
Pin 2-3 Close: Clear CMOS data

### Power Connector (24pin)

\*Stromanschluss (24-polig)  
\*Connecteur d'alimentation (24 broches)  
\*Connettore alimentazione (24 pin)  
\*Conector de alimentación (24 patillas)  
\*منفذ توصيل الطاقة (24 ديويس)

\*Conector de alimentação (24 pinos)  
\*Złącze zasilania (24 pinowe)  
\*Разъем питания (24 вывода)  
\*電源コネクタ (24ピン)

### IDE Connector

\*IDE-Anschluss  
\*Conector IDE  
\*Connexioneur IDE  
\*Connettore IDE  
\*Conector IDE  
\*Złącze IDE  
\*Разъем IDE  
\*IDE-コネクタ  
\*منفذ IDE

### PCI-Express x16 Slot

\*PCI Express x16-Steckplatz  
\*Fente PCI Express x16  
\*Alloggio PCI Express x16  
\*Ranura PCI express x16  
\*منفذ PCI Express x16

\*Ranhura PCI Express x16  
\*Gniazdo PCI Express x16  
\*Cnot PCI Express x16  
\*PCI Express x16-Слот  
\*منفذ PCI Express x16

### Back Panel I/O Connectors

\*Rückseiten-E/A  
\*E/S du panneau arrière  
\*I/O pannello posteriore  
\*Panel trasero de E/S  
\*منفذ دخل/خرج اللوحة الخلفية

\*Entradas/Saídas no painel traseiro  
\*Back Panel I/O  
\*Задняя панель средств ввода-вывода  
\*背面パネル I/O

### Power Connector (4pin)

\*Stromanschluss (4-polig)  
\*Connecteur d'alimentation (4 broches)  
\*Connettore alimentazione (4 pin)  
\*Conector de alimentación (4 patillas)  
\*Conector de alimentação (4 pinos)  
\*Złącze zasilania (4 pinowe)  
\*Разъем питания (4 вывода)  
\*電源コネクタ (4ピン)  
\*منفذ توصيل الطاقة (4 ديويس)

1	2	3	4
---	---	---	---

1 +12V  
2 +12V  
3 Ground  
4 Ground

### LGA 775 for Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron 4xx Processor

FSB: 800/1066/1333/1600 MHz

\*LGA 775 : Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx Prozessoren  
\*LGA 775 : Processeurs Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Processore Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Procesador Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Processor Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Processor Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Процессор Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*LGA 775 : Процессор Intel Core2Duo/Core2Quad/Pentium Dual-Core/Celeron Dual-Core/Celeron 4xx  
\*منفذ ل Intel Core2Duo/Core2Quad/Pentium Dual-Core/ Celeron Dual-Core/Celeron 4xx

### NB Chipset : Intel G31

\*NB Chipset: Intel G31  
\*NB Conjunto de chips: Intel G31  
\*Intel G31

\*Набор микросхем: Intel G31  
\*Чип-сетап: Intel G31  
\*مجموعة الشرائح: Intel G31

### CPU Fan Header

\*CPU-Lüfter-Sockel  
\*Embase de ventilateur UC  
\*Colettore ventolina CPU  
\*Cabecera de ventilador de CPU  
\*Conector da ventoinha da CPU  
\*Złącze głowkowe wentylatora procesora  
\*Контактирующее приспособление вентилятора центрального процессора  
\*CPU-ファンヘッド  
\*وصلة مروحة وحدة المعالجة المركزية

1	2	3	4
---	---	---	---

1 Ground  
2 +12V  
3 FAN RPM rate sense  
4 Smart Fan Control

### DDR2 DIMM Slots

Each DIMM supports 256MB/512MB/1GB/2GB DDR2 667/800/1066

\*DDR2 DIMM-Steckplätze  
\*Jeder DIMM unterstützt 256MB/512MB/1GB/2GB DDR2 667/800/1066  
\*Fentes DDR2 DIMM  
\*Chaque DIMM prend en charge des DDR2 667/800/1066 de 256Mo/512Mo/1Go/2Go  
\*Alloggi DIMM DDR2  
\*Ciascun DIMM supporta DDR2 667/800/1066 256MB/512MB/1GB/2GB  
\*Ranhuras DIMM DDR2  
\*Cada DIMM admite DDR2 667/800/1066 de 256MB/512MB/1GB/2GB  
\*Ranhuras DIMM DDR2  
\*Cada módulo DIMM suporta uma memória DDR2 667/800/1066 de 256MB/512MB/1GB/2GB  
\*Gniazda DDR2 DIMM  
\*Każde gniazdo DIMM obsługuje moduły 256MB/512MB/1GB/2GB DDR2 667/800/1066  
\*Слоты DDR2 DIMM  
\*Каждый модуль DIMM поддерживает 256MB/512MB/1GB/2GB DDR2 DIMM  
\*منفذ DDR2 DIMM  
\*كل DIMM يدعم ذاكرة من نوع DDR2 667/800/1066 بسعة 256 مбайت / 512 مбайت / 1 جيجابايت / 2 جيجابايت



Step 1:CPU Installation



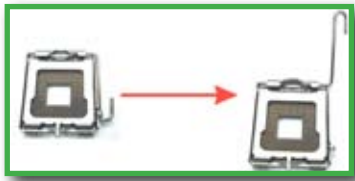
**LGA 775 CPU Socket**  
Supports Intel Core2Duo/Core2Quad/  
Pentium Dual-Core/Celeron Dual-Core/  
Celeron 4xx processor  
FSB: 800/1066/1333/1600 MHz

Step 1: Remove the protection cap from the CPU socket and keep the cap well.

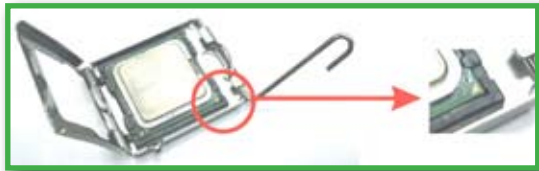


**⚠ CAUTION**  
Our RMA policy only accepts the mainboard comes with the cap on the CPU socket, so please keep the protection cap well after installation. We will not be responsible for any damage to the pin-leg of the CPU socket resulting from misplacement/loss/incorrect removal of the protection cap.

Step 2: Pull the socket locking lever out from the socket and then raise the lever up to a 90-degree angle.



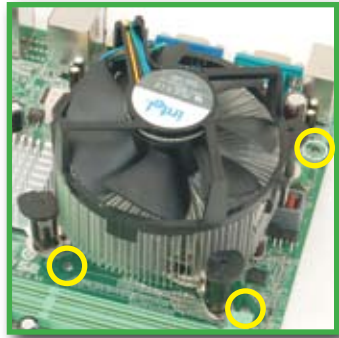
Step 3: Look for the triangular cut edge on socket, and the golden dot on CPU should point forwards this triangular cut edge. The CPU will fit only in the correct orientation.



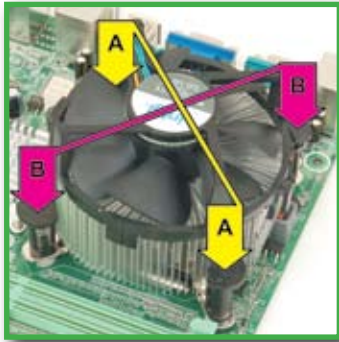
Step 4: Hold the CPU down firmly, and then lower the lever to locked the position.



Step 5: Place the CPU fan assembly on top of the installed CPU and make sure that the four fasteners match the motherboard holes. Orient the assembly and make the fan cable is closest to the CPU fan connector.



Step 6: Press down two fasteners at one time in a diagonal sequence to secure the CPU fan assembly in place. CPU installation completes.



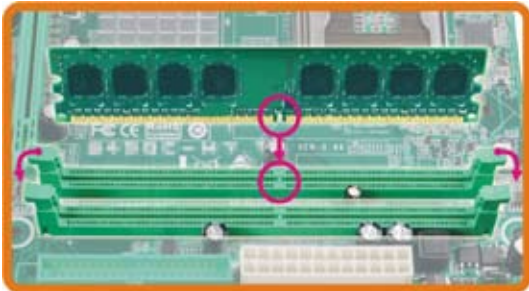
**Note:**  
Do not forget to connect the CPU fan connector. For further information, please refer to **Step 3:Power Connection**.

Step 2:Memory Installation



**DDR2 DIMM Slot x2**  
Supports DDR2 667/800/1066  
Each DIMM supports 256MB / 512MB / 1GB / 2GB DDR2  
Max Memory Capacity is 4GB

Step 1: Unlock a DIMM slot by pressing the retaining clips outward. Align a DIMM on the slot such that the notch on the DIMM matches the break on the Slot.



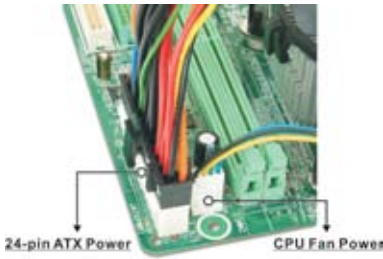
Step 2: Insert the DIMM vertically and firmly into the slot until the retaining chip snap back in place and the DIMM is properly seated.



Step 3:Power Connection

**CPU Fan Power (JCFAN1)**  
JCFAN1 supports 4-pin head connector. When connecting with wires onto connectors, please note that the black wire is Ground and should be connected to pin#1(Ground).

**24-pin ATX Power (JATXPWR1)**  
JATXPWR1 is the main power supply connector located along the edge of the board next to the DIMM slots. Firmly plug the power supply cable into the connector and make sure it is secure.



**4-pin ATX Power (JATXPWR2)**  
JATXPWR2, the 4-pin ATX 12V power connection, is used to provide power to the CPU. Align the pins to the connector and press firmly until seated.



**Installation Complete**  
Follow the three steps to finish CPU, memory, and power installation, and the whole motherboard assembly should look like this picture.

Clear CMOS Header

The Occasion to Clear CMOS

1. Forgot the supervisor/user password preset in the BIOS menu.
2. Unable to boot up the system because the CPU clock was incorrectly set in the BIOS menu.
3. The CMOS data becomes corrupted.



Clear CMOS Header (JCMOS1)

- Pin 1-2 Close: Normal Operation (default)
- Pin 2-3 Close: Clear CMOS data

Clear CMOS Procedure

1. Remove AC power line.
2. Set the jumper to "Pin 2-3 close".
3. Wait for five seconds.
4. Set the jumper to "Pin 1-2 close".
5. Power on the AC.
6. Reset your desired password or clear the CMOS data.

NOTE: How to Setup Jumpers

The illustration shows how to set up jumpers. When the jumper cap is placed on pins, the jumper is "close", if not, that means the jumper is "open".



Pin Opened



Pin Closed



Pin 1-2 Closed

Driver & Manual

After you installed your operating system, please insert the Fully Setup Driver CD into your optical drive and install the driver for better system performance. You will see following window after you insert the CD.



Click on **Driver** to start the process of driver installation.



The installation program will detect your system to find out the driver needed to be installed.



Click on **Install** and the program will begin to install the proper driver for your system.

When the driver installation completes, there will be a dialogue appears asking you to restart the system. Please click on **YES** to restart your computer.

For more information of the mainboard setup and BIOS setup, please refer to the full version manual in the setup CD.

In the Setup CD auto-run program, click on **Manual** and then click on **Mainboard User Manual** or **BIOS User Manual**.

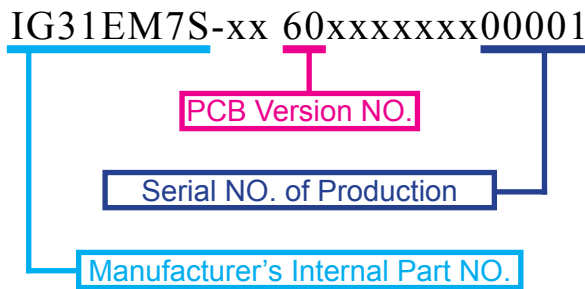


Package Checklist

- ▲ Installation Guide x 1
- ▲ Fully Setup Driver CD x 1 (full version manual files inside)
- ▲ Serial ATA Cable x 1
- ▲ Serial ATA Power Cable x 1 (optional)
- ▲ HDD Cable x 1
- ▲ Rear I/O Panel x 1
- ▲ FDD Cable x 1 (optional)
- ▲ Parallel Printer Cable x1 (optional)

Note: The package contents may differ by area or your motherboard version.

Serial NO. Definition



Q&A of Technical Support

**Q: How to get a quick response for my request on technical support?**  
A: Please carry out a simple troubleshooting before sending "Technical Support Form" on our website.

**Q: Is the motherboard dead? Do I need to return it to where I bought from or go through an RMA process?**

A: After you had gone through the troubleshooting procedures, yet the problem still exists, or you find an evident damage on the motherboard. Please contact your reseller shop to get the RMA service.

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If you do not properly set the motherboard settings, causing the motherboard to malfunction or fail, we cannot guarantee any responsibility.

G31-M7G DVI  
Quick Installation Guide



Mainboard  
For Intel Processor